

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1. (Currently Amended) A guiding device for guiding a vehicle to a target position by controlling a steering angle while estimating a vehicle position at least based on a steering angle value, wherein characterized in that, in estimating the vehicle position, a slowing operation with respect to a change in a moving distance of the vehicle is applied to a turning curvature that is estimated based on the steering angle value, and a compensation for a dynamic delay of the turning curvature due to a torsional deformation of a tire of the vehicle is performed.
2. (Currently Amended) The guiding device as claimed in claim 1, wherein a degree of slowing in the slowing operation is controlled based on detection of changes in a characteristic of [[a]]the tire.
3. (Currently Amended) The guiding device as claimed in claim 2, wherein the characteristic of the tire includes a degree of abrasion of [[a]]the tire, temperature of [[a]]the tire or air pressure of [[a]]the tire.
4. (Original) The guiding device as claimed in claim 1, wherein a degree of slowing in the slowing operation is controlled based on a degree of abrasion that is estimated by calculating a total traveling distance of the vehicle.
5. (Currently Amended) The guiding device as claimed in claim 1, wherein a degree of slowing in the slowing operation is increased when an absolute steering angle exceeds [[the]]a predetermined threshold.
6. (Original) The guiding device as claimed in claim 1, wherein a degree of slowing in the slowing operation is increased as an absolute steering angle increases.

7. (Original) The guiding device as claimed in claim 1, wherein a degree of slowing in the slowing operation is controlled based on detection of a friction coefficient of a road.

8. (Currently Amended) A vehicle position estimating device, comprising: a detector for detecting a moving distance of a vehicle; a change amount calculator for calculating an amount of a change in a direction of the vehicle every small moving distance based on a steering angle value; and a vehicle position estimator for estimating a position of the vehicle based on the amount of the change in the direction of the vehicle calculated by the change amount calculator; wherein in calculating the amount of the change in the direction of the vehicle, the change amount calculator applies a slowing operation with respect to a change in a moving distance of the vehicle to a turning curvature that is estimated based on the steering angle value, and performs a compensation for a dynamic delay of the turning curvature due to a torsional deformation of a tire of the vehicle.